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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Zohar Agrest

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EXAMINER

CONSILVIO, MARK J

ART UNIT

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2872

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,263	Applicant(s) AGREST, ZOHAR	
	Examiner Mark Consilvio	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 93-123 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 93-123 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/09/2007</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 03/09/2007 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language (i.e. CN 1413859). It has been placed in the application file, but the information referred to therein has not been considered.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 93, 95, 109-112, 122, and 123 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuszto et al. (US Patent No. 4,746,206).

With respect to claim 93, Kuszto discloses an automatic mirror position adjustment system for a vehicle, comprising: a) at least one mirror (47) movably mountable to said vehicle (20); b) a turning sensor (88, 66) mountable to said vehicle and adapted for generating input signals responsive to rotations of said vehicle about at least two orthogonal axes; c) a control unit (60') operatively connected to said turning sensor and adapted for generating output signals responsive to said input signals; d) a driving mechanism (86) operatively connected to said control unit and coupled to the or each said at least one mirror for rotating the or each mirror about said at least two orthogonal axes in response to said output signals (figs. 4-7).

With respect to claim 95, Kuszto discloses said turning sensor (66) is gyroscope-based (col. 4, lines 62-65).

With respect to claims 109 and 122, Kuszto discloses an automatic mirror panning system for a vehicle and a corresponding panning method, comprising: a) at least one mirror (47) movably mountable to said vehicle (20); b) a control unit (60') adapted for generating output signals responsive to a predetermined input signal; c) a driving mechanism (86) operatively connected to said control unit and coupled to the or each said at least one mirror for panning the or each mirror through a predetermined angular path about said at least one axis in response to said output signals (i.e. as the handlebars rotate the mirror would be rotated or perform "panning" in the opposite direction) (figs. 4-7).

With respect to claims 110 and 123, Kuszto discloses angular path provides a visual scan of an effectively expanded field of view for a driver of said vehicle via a corresponding said mirror.

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With respect to claim 111, Kuszto discloses said predetermined input signal is provided via an interface unit (i.e. an ignition switch) operatively connected to said control unit (60'), wherein said interface unit is adapted for enabling a user to selectively activate or deactivate said system, and wherein said interface unit is further adapted for instructing said control unit to provide output signals to said driving mechanism for returning said at least one mirror to a default position that provides optimal fields of view to a driver of the vehicle when the vehicle is traveling along a straight and level path, when said system is deactivated (col. 5, lines 11-22).

With respect to claim 112, Kuszto discloses an automatic mirror position adjustment method for a vehicle, comprising: a) providing at least one mirror (47) movably mountable to said vehicle (20); b) sensing rotation of said vehicle (via sensors 66 and 88) about at least two orthogonal axes and generating input signals responsive to said rotation; c) generating output signals responsive to said input signals (via controller 60'); d) rotating the or each mirror (via motors 86) about said at least two orthogonal axes in response to said output signals.

Claims 109-111, 122, and 123 are rejected under 35 U.S.C. 102(b) as being anticipated by Cummins (GB Patent No. 2279631 A).

With respect to claims 109 and 122, Cummins discloses an automatic mirror panning system for a vehicle and a corresponding panning method, comprising: a) at least one mirror (22) movably mountable to said vehicle; b) a control unit adapted for generating output signals responsive to a predetermined input signal; c) a driving mechanism (3) operatively connected to said control unit and coupled to the or each said at least one mirror for panning the or each

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mirror through a predetermined angular path about said at least one axis in response to said output signals (figs. 1-7).

With respect to claims 110 and 123, Cummins discloses angular path provides a visual scan of an effectively expanded field of view for a driver of said vehicle via a corresponding said mirror (figs. 1-3).

With respect to claim 111, Cummins discloses said predetermined input signal is provided via an interface unit (i.e. directional indicator) operatively connected to said control unit, wherein said interface unit is adapted for enabling a user to selectively activate or deactivate said system, and wherein said interface unit is further adapted for instructing said control unit to provide output signals to said driving mechanism for returning said at least one mirror to a default position that provides optimal fields of view to a driver of the vehicle when the vehicle is traveling along a straight and level path, when said system is deactivated (pp. 2-4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 94, 97-108, 113, and 117-121 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuszto et al. (US Patent No. 4,746,206) in view of Ogawa et al. (JP Patent Publication No. 61-291242 A).

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With respect to claims 94 and 113, Kuszto discloses or suggests all the limitations of claim(s) 93 and 112 as stated *supra*. Though Kuszto teaches the turning sensor (66, 88) is adapted to generating input signals responsive to rolling (i.e. tilting) and yawning (i.e. turning), Kuszto does not expressly disclose said turning sensor is adapted for generating input signals responsive to pitching rotations of said vehicle. However, several prior art vehicle systems are known to provide sensor that detect a change in pitch of a vehicle and send corresponding signals to actuate a mirror to compensate for the change in pitch. For example, Ogawa discloses such a system including a turning sensor (7) adapted to generate input signals responsive to changes in pitch (abstract). Hence, Ogawa discloses a comparable device that was modified in the same way as the claimed invention. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to apply the known technique of providing a control unit with an inclination sensor and driving unit to achieve the claimed invention and one skilled in the art could have in the same way as Ogawa and the modification would have yielded predictable results (i.e. a system that additionally corrects the field of view for an operator during inclination of the vehicle). See *Ruiz v. AB Chance Co.* 357 F.3d 1270, 69 USPQ2d 1686 (Fed. Cir. 2004).

With respect to claims 97 and 117, the combination of Kuszto and Ogawa discloses or suggests said driving mechanism is adapted for rotating the or each mirror about in three orthogonal axes (i.e. tilt, turning, and inclination) including said at least two axes.

With respect to claims 98 and 118, the combination of Kuszto and Ogawa discloses or suggests said control unit is adapted to provide said output signals according to predetermined criteria (i.e. actuation signals corresponding to each sensor).

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With respect to claims 99 and 119, the combination of Kuzstos and Ogawa discloses or suggests said control unit provides said output signals to said driving mechanism such that said driving mechanism provides a rotation to said corresponding mirror in each said axis in directions opposed to the rotation of the said vehicle about each said axis, respectively.

With respect to claim 100, the combination of Kuzstos and Ogawa discloses or suggests said control unit is adapted for providing output signals to said driving mechanism for returning said at least one mirror to a default position that provides optimal fields of view to a driver of the vehicle when the vehicle is traveling along a straight and level path (i.e. since a driver would normally optimize the mirrors for this condition).

With respect to claim 101, the combination of Kuzstos and Ogawa discloses or suggests said control unit is adapted for providing output signals to said driving mechanism for pitching said at least one mirror to a position that provides optimal fields of view to a driver of the vehicle when the vehicle is traveling along an inclined path (Ogawa abstract).

With respect to claim 102, the combination of Kuzstos and Ogawa discloses or suggests said control unit is adapted for providing output signals to said driving mechanism for rolling said at least one mirror to is traveling along a banked path (i.e. since the banked path would tilt the motorcycle).

With respect to claim 103, the combination of Kuzstos and Ogawa discloses or suggests an interface unit operatively connected to said control unit, wherein said interface unit is adapted for instructing said control unit to provide output signals to said driving mechanism for returning said at least one mirror to a default position that provides optimal fields of view to a driver of the vehicle when the vehicle is traveling along a straight and level path. (Kuzstos col. 5, lines 11-22).

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With respect to claim 104, the combination of Kuszto and Ogawa discloses or suggests all the limitations of claim(s) 103 as stated *supra*. The combination does not expressly disclose said interface unit is adapted for setting and storing said default positions for a plurality of users. However, several prior art systems teach rearview mirror assemblies with memory unit that allow the mirror to be reset to a particular desired position. Conventionally, this allows the primary driver (and secondary, etc...) of the vehicle to quickly adjust the mirrors to the optimal position after another person of different height has driven the vehicle and moved the mirrors to their particular settings. The known technique of providing an interface unit adapted for setting and storing said default positions for a plurality of users was recognized as part of the ordinary capabilities of one skilled in the art. One of ordinary skill in the art would have been capable of applying this known technique to the combination of Kuszto and Ogawa that was ready for improvement and the results would have been predictable to one of ordinary skill in the art. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to apply the known technique of providing an interface unit adapted for setting and storing said default positions for a plurality of users to achieve the claimed invention and the modification would have yielded predictable result of allowing the combined system of Kuszto and Ogawa to have stored mirror position settings for different individuals. See *In re Nilssen*, 851 F.2d 1401, 7 USPQ2d 1500 (Fed. Cir. 1988) and *Dann v. Johnston*, 425 U.S. 219, 189 USPQ 257 (1976).

With respect to claims 105 and 120, the combination of Kuszto and Ogawa discloses or suggests said control unit is adapted for selectively providing output signals responsive to a

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predetermined input, wherein said driving mechanism to pan the or each mirror through a predetermined angular path about said at least one said axis in response to said output signals.

With respect to claim 106, the combination of Kuszto and Ogawa discloses or suggests said angular path provides a yawing rotation to said at least one mirror.

With respect to claims 107 and 121, the combination of Kuszto and Ogawa discloses or suggests angular path provides a visual scan of an effectively expanded field of view for a driver of said vehicle via a corresponding said mirror.

With respect to claim 108, the combination of Kuszto and Ogawa discloses or suggests said angular path includes a rotation of a corresponding said mirror inboard towards said vehicle and outboard away from said vehicle.

Claims 96 and 114-116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuszto et al. (US Patent No. 4,746,206) in view of Ogawa et al. (JP Patent Publication No. 61-291242 A) and in further view of Horton (US Patent No. 6,647,352).

With respect to claims 96 and 114, the combination of Kuszto and Ogawa discloses or suggests all the limitations of claim(s) 94 and 113 as stated *supra*. The combination does not expressly disclose said turning sensor comprises an accelerometer arrangement capable of measuring accelerations of said vehicle in said at least two axes coupled to an angular rate sensor arrangement capable of measuring rotation rate of said vehicle in said at least two axes.

However, accelerometer arrangements coupled to angular rate sensor arrangements were known in the prior art to be a generally equivalent means as exemplified by Horton. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to replace

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the tilt, turning, and inclination sensors of Kuszto and Ogawa because the substitution of one known element for another known element would have yielded predictable results to one of ordinary skill in the art. See *In re Fout*, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982) and *In re Siebentritt*, 54 CCPA 1083, 372 F.2d 566, 152 USPQ 618 (1967).

With respect to claims 115 and 116, the combination of Kuszto, Ogawa, and Horton discloses or suggests said angular rate sensor measures angular rate of said vehicle about three orthogonal axes including said at least two axes and the step of integrating angular rate about each axis provided by said angular rate sensor to provide raw angles about each axis, and inferring tilt angle about each axis from acceleration measurements provided by said accelerometer arrangement, and forcing the raw angles to match the tilt angles for each axis over a predetermined time period (Horton col. 4, line 50 – col. 9, line 32).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references disclose features similar to those claimed or disclosed by the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Consilvio whose telephone number is (571) 272-2453. The examiner can normally be reached on Monday thru Thursday, 8:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Mark Consilvio/
Examiner, Art Unit 2872